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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,283	04/16/2004	Philippe Piret	01807.102296.	7930

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EXAMINER	
ALPHONSE, FRITZ	
ART UNIT	PAPER NUMBER
2112	
MAIL DATE	DELIVERY MODE
08/28/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/825,283	PIRET ET AL.	
	Examiner	Art Unit	
	FRITZ ALPHONSE	2112	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 July 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,11-13,15-18 and 22-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-5,11-13 and 15-18* is/are allowed.

6)☒ Claim(s) *22,27 and 28* is/are rejected.

7)☒ Claim(s) *23-26* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *2*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/25/2008 has been entered.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 22, 27 and 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Dill (US Pub. No. 2002/0196862 A1).

As to claim 22, Dill (fig. 34) discloses a method of decoding received symbols, including the steps of: determining a current state of transmission (0033); selecting one of a plurality of available decoding algorithms in accordance with the current state of the transmission determined in said determining step; and decoding the received symbols by using the selected decoding algorithm (0300).

As to claim 27, Dill (fig. 34) shows a device for decoding received symbols, comprising determination means for determining a current state of transmission (Dill teaches the use of algorithm for determining a current state of transmission; [0214, 0033]); selection means for selecting one of a plurality of available decoding algorithms in accordance with the current state of the transmission determined by said determination means (paragraph [0300]). Furthermore, Dill discloses decoding means (a decoder; paragraph [0295]) for decoding the received symbols by using the selected decoding algorithm (0300).

As to claim 28, the claim differs from claim 22 by the additional limitation "Computer program stored in a computer-readable medium, comprising computer program code instructions for executing the steps of a decoding method." However, the limitations are obvious and well known in the art, as evidenced by Dill. Dill discloses a computer (see paragraph 0250) that can be used for executing the steps of a decoding method according to Claim 22.

Allowable Subject Matter

5. Claims 1, 11, 13 and 18 are allowed.

6. The closest art of record, Dill (US Pub. No. 2002/0196862 A1) discloses an apparatus and method for circular trellis coded modulation encoding for a digital communication system. However, Kim does not disclose the limitations of claims 1, 11,13 and 18.

Claims 1, 11 contain allowable subject matter because none of the cited references either singular or in combination discloses " a method of coding information symbols according to a code defined on a Galois field F_q, where q is an integer greater than 2 and equal to a power of a prime number, and of length n=p(q-1), where p is an integer greater than 1, comprising the steps of: a) choosing a p-tuple of integers (t_1, . . . , t_p) is chosen such that q-1>t_1>t_2> . . . >tp>0, and a p-tuple of diagonal square matrices (Y_1, . . . , Y_p) of dimension (q-1) on F_q such that, for any i(1 <=q-1), the p elements in position (i,i) of these matrices Y_1, . . . , Y_p are different in pairs."

Claim 13 and 18 contains allowable subject matter because none of the cited references either singular or in combination discloses " a device for decoding received words r resulting from the transmission of coded words v comprising: an error correction unit able to apply an error correction algorithm to each word received r, so as to supply at least one component $\underline{u}$,(where l=1, . . . , p) of a post-associated word $\underline{u}$, and a redundancy elimination unit able to remove from the component $\underline{u}_1$ the symbols situated at the positions identical to the positions of the component $\underline{u}_1$ with the same/of the corresponding precoded word $\underline{u}$, in which redundant symbols were placed at the time of coding."

Claims 2-5, 12, 15, 17, 16 are allowed by virtue of dependency.

Claim 23 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 23 contains allowable subject matter because none of the cited references either singular or in combination discloses " a decoding method wherein said determining step includes determining whether or not a mean transmission error rate exceeds a predetermined threshold, and said selecting step includes selecting a first decoding algorithm if the mean transmission error rate is determined to exceed the predetermined threshold and selecting a second decoding algorithm is selected if the mean transmission error rate is determined not to exceed the predetermined threshold."

Claims 24-26 would be allowed by virtue of dependency.

Response to Arguments

7. Applicant's arguments with respect to claims 1-5, 11-13, 15-18 23-26 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks, Washington, D.C. 20231

or faxed to: (703) 872-9306 for all formal communications.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fritz Alphonse, whose telephone number is (571) 272-3813. The examiner can normally be reached on M-F, 8:30-6:00, Alt. Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques, can be reached at (571) 272-6962.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-3824

Information regarding the status of an application may also be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Fritz Alphonse/

Art Unit 2112

8/14/2008

/Shelly A Chase/

Primary Examiner, Art Unit 2112